



AspLE I

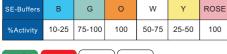
Recognition Sequence:

S

500 units 10,000 u/ml GCG↓C C↑GCG

Exp:

Store at -20°C



37°C



Ph/F+7(383)333-6853 info@sibenzyme.com www.sibenzyme.com

CERTIFICATE OF ANALYSIS

Source: Arthrobacter species Le3860.

Supplied in:

10 mM Tris-HCl (pH 7.5), 100 mM NaCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol, $100~\mu g/ml$ BSA, 50% glycerol.

Reaction Conditions:

1x SE-Buffer O, Incubate at 37° C.

 1X SE-Buffer 0 (pH 8.5 @ 25° C):

 50 mm Tris-HCl
 100 mm NaCl

 10 mm MgCl₂
 1 mm DTT

Heat Inactivation:

No (80°C for 20 minutes).

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 μg of λ DNA in 1 hour at 37°C in a total reaction volume of 50 μl .

Quality Control Assays

<u>Ligation</u>:After 10-fold overdigestion with AspLE I, >90% of the DNA fragments can be ligated with T4 DNA Ligase and recut.

 $\frac{16\text{-Hour Incubation:}}{\text{DNA and 20 Units of enzyme incubated for 16 hours}} \text{ resulted in the same pattern of DNA bands as a reaction incubated for 1 hour.}$

Oligonucleotide Assay: No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 10 units of restriction endonuclease for 3 hours.

Enzyme Properties:

When using a buffer other than the optimal (Supplied) SE-Buffer, it may be necessary to add more enzymes to achieve complete digestion.

Blocked by

5'-G(5mC)GC-3'/3-CG(5mC)G-5' methylation. Not blocked by 5'-GCG(5mC)-3'/3`-(5mC)GCG-5` or 5'-GCG(5mC)-3'/3'-CGCG-5' methylation.

Cut hemi methylated site: 5'-G(5mC)GC-3'/3'-CGCG-5'

Reagents Supplied with Enzyme: 10X SF Buffer O.